

Amendments to the Drawings:

The attached sheet of drawings includes changes to FIGS. 1-4. This sheet, which includes FIGS. 1-7, replaces the original sheet including FIGS. 1-7.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

This application has been carefully reviewed in view of the Office Action dated August 25, 2006. Claims 1-22 are pending. Claims 2-4, 7, 9, 10, 13, 16, 17, 20 and 21 are withdrawn from consideration after election of the species of FIGS. 11-13.

FIGS. 1-4 were objected to as lacking labeling indicating the figures as "Prior Art". In response, FIGS. 1-4 have been amended to add the legend "PRIOR ART". A replacement sheet of drawings is attached. Claims 1 and 8 have been amended.

The basic premise of all current joist hangers or beam supports is that the wood member [joist or beam] remains supported by bearing upon the base of the metal connector. In reality, wooden members are subject to shrinkage, and nails or bolts that were installed in the sides of the connector to stabilize the wooden member end up supporting the member. In this situation, the bottom of the wooden member ends up floating above the connector seat. We believe manufacturers do not consider this means of support in their design or capacity ratings. The connectors are sized based upon the bearing area of the connector in contact with the wooden member. The stabilizing nails or bolts are not considered. The theoretical strength of the connector is reduced dramatically if contact between the wood member and the base of the metal connector is not maintained.

The present invention involves retrofitting an existing hanger or beam support because something is required to reestablish the bearing once shrinkage has occurred. The present invention discloses a process and system for retrofitting a wooden member support, such as joist hanger or beam support. This system is usable in any situation where wooden joists and joist hangers or

beams and beam supports are employed. These situations can occur anywhere there is a need to construct a frame, structure or the like.

A wooden member support retrofit system includes a wooden member support having a support base and a wooden member supported by the wooden member support. The system also includes a shim disposed in a space formed between the base and the wooden member due to relative movement of the base and the wood member over time, so that the weight of the wooden member is borne by the base of the wooden member support.

The shim has a component for securing the shim to the wood member. This component may come in various forms such as a deformable knife tab or an aperture for a fastener. The component may also be such that the shim maintains contact between the wood member and the base as the wood member moves such as a spring or a one-way, ratchet mechanism which increases in thickness as the wood member moves. The component may be in the form of a flexible, compressible material that expands to maintain contact between the wood member and the base as the wood member moves.

The system includes a non-load bearing lateral fastener for securing the wooden member in the wooden member support.

A process of retrofitting a wooden member support system includes measuring a space formed between a base of a wooden member support and a wooden member due to relative movement of the base and the wooden member over time. The process further includes selecting a shim and placing the shim in the space formed between the base and the wooden member so that the weight of the wooden member is borne by the base of the wooden member support.

The selecting step includes the step of choosing a shim having a component for maintaining contact between the wooden member and the base as the wooden member moves. This component may be selected from a group of various components such as a deformable knife tab, an aperture for a

fastener, a flexible and compressible material, a spring, and a one-way ratchet mechanism.

The process includes the step of securing the wooden member and wooden member support together with a non-load bearing lateral fastener.

Claims 1, 5-6, 8, 11, 12, 14, 15, 18, 19 and 22 were rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Published Application No. 2003/0009980 to Shahnazarian. The Office Action makes a conclusory statement that the foam tape meets the limitation of a spring. However, the adhesive pad disclosed in Shahnazarian is used only as a means for attaching the beam to the support at the time the beam is initially positioned within the support. While the adhesive may stretch to fill the space created by the wooden beam or member shrinking away from the support base, the adhesive pad only pulls downward on the wooden member as the wooden member shrinks away from the support base and increases the load on the already overstressed stabilizing connectors. Thus, as the wooden member shrinks away from the base, the adhesive pad does not bear the weight of the wooden beam and does not translate the weight of the wooden beam to the support base. Shahnazarian merely discloses a new design of connector that provides attachment by means of adhesive strips. The stabilizing nails referred to in paragraphs [0051] and [0065] of Shahnazarian create the potential to compromise that design in the case of wood shrinkage. On the other hand, the present invention as set forth in claims 1, 5-6, 8, 11, 12, 14, 15, 18, 19 and 22, provides a shim that would fill the void created by the shrinkage and bear the weight of the wooden member, translating that weight to the support base.

Claims 1 and 8 have been amended to reflect that the shim expands to fill the space to maintain contact with the wooden member so that the weight of the wooden member is borne by the base of the wooden member support due to the shim translating the weight of the wooden member upon the shim to the

support base. Shahnazarian does not address nor solve the problem to which the present invention is directed. The adhesive pad of Shahnazarian does not bear the weight of the wooden member after shrinkage has occurred and cannot therefore translate the weight from the post-shrinkage wooden member to be borne by the base of the wooden member support. As seen in FIGS. 11-13 of the instant application, the spring is expanding as the wooden beam shrinks to bear the weight of the wooden beam which, in turn, is translated by the spring to the support. The adhesive pad of Shahnazarian does not do this. In fact, the adhesive pad only pulls down on the wooden beam which only increases the stress on the lateral fasteners.

With respect to claims 6 and 12, the Office Action fails to take into account the specific language that the spring is expanding to maintain contact between the wooden member and the base as the wooden member moves. The Office Action states that the foam material meets the limitation of a spring but focuses in on compression rather than the claimed expansion. Shahnazarian does not disclose any expansion of the adhesive pad that would result in the weight of the beam being translated by the adhesive pad to the base of the support.

Similarly, with respect to claims 14 and 22, the Shahnazarian adhesive pad is not a shim. The Shahnazarian adhesive pad is only used as an attachment mechanism. Furthermore, the adhesive pad of Shahnazarian does not have the structure to function as a shim. Moreover, Shahnazarian does not disclose the measuring of a space formed between a base of a wooden member support and a wooden member due to relative movement of the base and the wooden member over time, the selection of a shim, or placing a shim in the space formed between the base and the wooden member so that the weight of the wooden member is borne by the base of the wooden member support. The

Office Action fails to provide any support with respect to Shahnazarian allegedly disclosing that any expansion of the adhesive pad would result in the weight of the beam being translated by the adhesive pad to the base of the support.

Claims 1, 5-6, 8, 11, 12, 14, 15, 18, 19 and 22 were also rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,856,250 to Gronau et al. However, Gronau proposes a floor system sleeper device that is not analogous to wood connectors and does not suggest a retrofit to compensate for the loss of bearing support as a result of wood shrinkage. The spring in the Gronau system is a compensator for the horizontal movement of a floor system, which could be caused by moisture variations in the wood flooring. This is completely nonanalogous to a connector that is primarily designed to resist vertical gravity loads and dependent upon the physical contact of the wood member and the connector to create bearing support. There is no parallel implied or stated in the Gronau design.

Nowhere does Gronau disclose tabs 15 as "lateral non-load bearing fasteners". The Office Action does not provide any support with respect to the assertion that Gronau discloses that expansion of the spring would result in the weight of the beam being translated by the spring to the base of the support. The Office Action also fails to explain how the alleged shim 20 of Gronau includes the spring 40 such that the spring 40 expands to maintain contact between the wooden member and the base as the wooden member moves.

Claims 1 and 8 have been amended to reflect that the shim expands to fill the space to maintain contact with the wooden member so that the weight of the wooden member is borne by the base of the wooden member support due to the shim translating the weight of the wooden member upon the shim to the support base. Gronau does not address nor solve the problem to which the present invention is directed.

With respect to claims 6 and 12, the Office Action fails to take into account the specific language that the spring is expanding to maintain contact between the wooden member and the base as the wooden member moves. In

fact, the spring only pulls on the wooden beam horizontally and does not expand vertically to keep the wooden beam in contact with the support base. Gronau does not disclose that expansion of the foam strip or spring would result in the weight of the beam being translated by the foam strip or spring to the base of the support.

Similarly, with respect to claims 14 and 22, the Gronau foam strip and spring are not shims. Moreover, Gronau does not disclose the measuring of a space formed between a base of a wooden member support and a wooden member due to relative movement of the base and the wooden member over time, the selection of a shim, or placing a shim in the space formed between the base and the wooden member so that the weight of the wooden member is borne by the base of the wooden member support.

CONCLUSION

In view of the foregoing, it is clear that the present invention distinguishes over the cited art. Accordingly, it is submitted that claims 1-22 are in condition for allowance, notice of which is respectfully requested.

Respectfully submitted,

KELLY LOWRY & KELLEY, LLP

/Scott W. Kelley/

Scott W. Kelley
Registration No. 30,762

SWK:nh
6320 Canoga Avenue, Suite 1650
Woodland Hills, California 91367
(818) 347-7900